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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,576	09/22/2003	Jong Dam Kim	2658-0311P	6443
2292	7590	02/09/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			PATEL, PARESH H	
			ART UNIT	PAPER NUMBER
			2829	

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary

Application No.

10/665,576

Applicant(s)

KIM ET AL.

Examiner

Paresh Patel

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 5-10 and 15-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 11, 12 and 14 is/are rejected.
- 7) ☒ Claim(s) 3 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group III, claims 11-14 in the reply filed on 01/05/2005 is acknowledged. The traversal is on the ground(s) that Gr. I and Gr. III are corresponding method and apparatus claims. Examination of method claims 1-4 of group I together with Gr. III does not place undue burden. This is found persuasive, therefore claims 1-4 of group I are rejoined and fully examined here.

Argument regarding species election is not persuasive because applicant did not distinctly and specifically point out the supposed errors.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4, 11-12 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Field (US 6545500).

Regarding claims 1 and 11, Field in fig. 7 discloses an apparatus/method for inspecting a display device substrate having a plurality of signal wirings and a plurality of electrostatic discharge damage (ESD) protection devices, the apparatus comprising:

- a conductive shorting bar [111] to short the ESD protection devices;
- a power supply [303] to supply a current to the signal wirings [102]; and
- a detection circuit [301] to determine a defectiveness [701] of at least one of the signal wirings [102] depending on the current flowing [lines 14-31 of column 29] on the signal wirings.

Regarding claims 2 and 12, Field in fig. 7 discloses the conductive shorting bar is provided in a jig [support for 111 on 100].

Regarding claims 4 and 14, Field in fig. 7 discloses the display device substrate is a TFT array substrate of a liquid crystal display [see fig. 9b].

Claims 1-2, 4, 11-12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Cheng et al. (US 2002/0063574 A1 May 30, 2002 now US 6720791).

Regarding claim 1 and 11, Cheng et al. (hereafter Cheng) in fig. 2-5 discloses an apparatus/method for inspecting a display device substrate having a plurality of signal wirings and a plurality of electrostatic discharge damage (ESD) protection devices, the apparatus comprising:

- a conductive shorting bar [20 and lines 40-42 of column 3] to short the ESD protection devices [ESD];

a power supply [40] to supply [using probe tip at pad 3] a current to the signal wirings [10 or Pi-Pn and electrodes of pixel]; and

a detection circuit [40] to determine a defectiveness of at least one of the signal wirings depending on the current flowing [S1] on the signal wirings.

Regarding claims 2 and 12, Chang discloses the conductive shorting bar is provided in a jig [lines 28-30, column 3].

Regarding claims 4 and 14, Chang discloses the display device substrate is a TFT array substrate of a liquid crystal display [lines 35-37 of column 3].

Allowable Subject Matter

Claims 3 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: No prior art has been found that meet all the limitations of claims 3 and 13 calling for an apparatus/methods for inspecting a display device substrate comprising a power supply supplies a high voltage to the signal wirings through a first shorting wiring, and a low voltage to the ESD protection devices through a second shorting wiring, to determine a defectiveness of at least one of a signal wiring.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paresh Patel whose telephone number is 572-272-1968. The examiner can normally be reached on 8:00 to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 571-272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paresh Patel
February 06, 2005